

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/001675 A2

- (51) International Patent Classification⁷: **G06F 3/00** (74) Agent: **OGILVY RENAULT**; Suite 1600, 1981 McGill College Avenue, Montreal, Québec H3A 2Y3 (CA).
- (21) International Application Number: **PCT/CA2004/000969** (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: **30 June 2004 (30.06.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/483,184 **30 June 2003 (30.06.2003)** **US** (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
- (71) Applicant and
(72) Inventor: **HYDER, Syed S.** [—/CA]; 4606 Hampton Avenue, Montreal, Québec H4A 2L4 (CA).

[Continued on next page]

(54) Title: **ALGORITHMIC GENERATION OF AFU CALLIGRAPHY**

1	ا	2	ال
	ا		ال
3	الر	4	الر
	ال ر		ال ر
5	الر	6	الر
	ال ر		ال ر
7	الر	8	الر
	ال ر		ال ر
9	الر	10	الر
	ال ر		ال ر

(57) Abstract: A method for processing a data string of Arabic text characters into Arabic calligraphic script representation data. The method comprises identifying words in the string; identifying a form of the characters in the words, the form comprising initial, medial, final and isolated; for the characters that are not of the isolated form, identifying a type of the characters as a function of compatibility with a type of a neighboring character; selecting, for each one of the characters in the data string, a glyph from a set of predetermined glyphs corresponding to the characters, the forms and the type; and determining a vertical offset for each glyph to match neighboring glyphs, the script representation data comprising glyph identification data and offset data for each character in the data string.

WO 2005/001675 A2



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*